

L 08930-67

ACC NR: AP6029844

SOURCE CODE: UR/0106/66/000/008/0047/0054

AUTHOR: Bleykhman, V. S.; Brusilovskiy, K. A.; Bobreshov, Ye. N.;
Yemel'yanov, G. A. 44

ORG: none

TITLE: Fidelity of start-stop telegraph transmission with distorted skirts of
code pulses

SOURCE: Elektrosvyaz', no. 8, 1966, 47-54

TOPIC TAGS: telegraph signal, signal analysis, signal reception, signal noise
separation

ABSTRACT: Lower estimates of the function S of distribution of start-stop
distortion in an n-element code combination were obtained by P. Bassole (Ann.
des Télécommunications, 1953, nos. 7-8). These estimates correspond to upper

Card 1/2

UDC: 621.391.833.4

L 08980-67

ACC.NR: AP6029844

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limits of the probability P of error in the reception of a character, because $P = 1 - S$. The present article offers a more accurate estimate of P . It is found that: (1) The upper estimate of P expressed in terms of the probability function χ^2 of the Pearson correspondence criterion may deviate from the true value of P by several orders of magnitude; this discrepancy substantially increases with (a) the correlation factor r (which characterizes the relation between the shifts of borders of the start-stop combination), (b) the channel-characteristics improvement, and (c) the receiver margin; (2) The upper estimate of P yields an incorrect conclusion that the reception fidelity with independent errors is lower than that with correlated errors; (3) According to the new more accurate formulas, P decreases by the factor of $1/n$ when r increases from 0 to 1 (where n is the number of working borders in the code combination); for $n = 2$, the variation of r from 0 to 0.7 practically does not affect P . Orig. art. has: 2 figures and 42 formulas.

SUB CODE: 17, 09 / SUBM DATE: 18Oct65 / ORIG REF: 009

Card 2/2 not

YEMEL'YANOV, G.P.

Expansion of the rock-products industry. Prom.stoi. 38
no.4:15-19 '60. (MIRA 13:8)
(Sand and gravel plants)

ACC NR: AP7003843 (A)

SOURCE CODE: UR/0122/67/000/001/0025/0027

AUTHOR: Yemel'yanov, G. S. (Engineer)

ORG: none

TITLE: Constructions of hydrostatic cushions

SOURCE: Vestnik mashinostroyeniya, no. 1, 1967, 25-27

TOPIC TAGS: hydrostatic bearing, hydrostatic pressure, friction coefficient, antifriction bearing, cavity liner

ABSTRACT: Various types of hydrostatic cushions combined with shoulder pieces were studied. In its simplest form the shoulder piece has the same surface curvature as the cushion. A liquid is constantly pumped into the gap between the parts, forming a continuous film. This gives the friction coefficient of 10^{-4} -- 10^{-7} . To produce an ideal, uniform thickness of film, the curvature of both members must be the same. This calls for precise finishing of the shoulder-piece surface, which is difficult. With a tilting shoulder-piece, a liner is used. In its simplest form, the facing surfaces of the liner and of the shoulder piece are flat. In the roller type the liner rolls on a flat base. The smaller the rolling curvature, the more effective the cushion (the limit being established by the bearing surface hardness). The liner and base may have similarly curved surfaces to produce a slipping lining. A more advanced

Card 1/2

UDC: 621.822-82

ACC NR: AP7003843

form of this self-adjusting liner has a limiter connecting the base-liner gap with the liner-shoulder-piece gap. Proper adjustment of the limiter distributes the load evenly. To provide greater tilting range, a biconcave or biconvex construction is used. In this type both the base and shoulder-piece surfaces are either concave or convex. The liner eliminates the effects of the lack of precision in the shoulder piece, but it may introduce disturbing effects caused by the mismatch of the surface symmetry, the nonconcentric gaps, and the uneven quality of the surface finishes. To correct for the surface symmetry mismatch, multiple grooves (3 or 4) are used, with the limiters distributing the liquid film properly. Orig. art. has: 4 figures.

SUB CODE: 13/ SUBM DATE: none

Card 2/2

"APPROVED FOR RELEASE: 03/15/2001

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YEMEL'YANOV, G.V.

PHASE I BOOK EXPLOITATION

SOV/6371

Vsesoyuznoye soveshchaniye po teorii veroyatnostey i matematicheskoy statistike. (6th, Vilnius, 1960.

Trudy VI Vsesoyuznogo soveshchaniya po teorii veroyatnostey i matematicheskoy statistike i kollokviuma po raspredeleniyam v beskonechnomernykh prostranstvakh (Transactions of the Sixth Conference on Probability Theory and Mathematical Statistics and of the Symposium on Distributions in Infinite-Dimensional Spaces held in Vilnius 5-10 September 1960) Vilnius, Gospolitizdat LitSSR, 1962. 493 p. 2500 copies printed.

Sponsoring Agency: Akademiya nauk Litovskoy SSR. Vil'nyusskiy gosudarstvennyy universitet imeni V. Kapsukasa. Matematicheskyy institut imeni V. A. Steklova, Akademiya nauk SSSR.

Editorial Board: N. N. Vorob'yev, B. V. Gnedenko, R. L. Dobrushin, Ye. B. Dynkin, A. N. Kolmogorov, I. P. Kubilyus, Yu. V. Linnik, Yu. V. Prokhorov, N. V. Smirnov, V. A. Statulyavichyus, and A. M. Yaglom. Ed.: D. Melinene; Tech. Ed.: O. Pakerite.

Card 1/17

3

Transactions of the Sixth Conference (Cont.)

SOV/6371

PURPOSE: Dissemination of scientific information.

COVERAGE: Because of various editorial difficulties, not all papers presented at the Conference could be included. The 86 papers presented here are divided by subject matter into 6 sections (see Table of Contents). The editors thank the members of the Mathematical Section of the Institute of Physics and Mathematics of the Lithuanian Academy of Sciences and the Department of Probability Theory and Number Theory at Vil'nyus University, particularly A. K. Aleshkyavichene, A. A. Mitlauskas, B. A. Ryauba, and R. V. Uzhdavinis. References, cited in the text at the end of the individual reports, comprise 489 entries: 316 Soviet (a number of which are translations), 2 Hungarian, 1 Polish, 139 English, 20 French, 10 German, and 1 Italian.

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SOV/6371

LIMIT THEOREMS

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2. Borovkov, A. A. Asymptotic Expansions and Large Deviations in the Problem of Two Samples 5
3. Borovkov, A. A. On the Distribution of the First Jump Value 7
4. Vilkauskas, L. L. Zones of Normal Convergence in the Multidimensional Case 23
5. Volkov, I. S. Limit Theorems for Large Deviations in the Case of a Finite Markov Chain 25
6. Yemel'yanov, G. V. On Local Limit Theorems for Densities 35

Card 3/17

3

TSFAS, B.S., dotsent, kand.tekhn.nauk; YEMEL'YANOV, G.V., student

Effect of some kinds of screw-thread coatings on pressure distribution in threads. Sbor.dokl.Stud.nauch.ob-va Fak.mekh. sel'.Kuib.sel'khoz.inst. no. 1:104-105 '62. (MIRA 17:5)

1. Kuybyshevskiy sel'skokhozyaystvennyy institut.

YEMEL'YANOV, G.V. (Leningrad)

Local limit theorem for densities. Izv. vys. ucheb. zav.;
mat. no.3:59-69 '64. (MIRA 17:12)

YEMEL'YANOV, G.Ye.; DEMIN, A.A.

Enameling pipes and apparatus. Transp. i khran. nefi no.8:7-8
'63. (MIRA 17:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'stvu
magistral'nykh truboprovodov.

LEVIN, B., kand. tekhn. nauk, starshiy nauchnyy sotrudnik;
YEMEL'YANOV, I.

Standardization and control of marine power plant performances. Mor. flot 23 no.7:25-26 JI '63. (MIRA 16:8)

1. Tsentral'nyy nauchno-issledovatel'skiy institut morskogo flota (for Levin). 2. Nachal'nik otdela teplotekhniki Baltiyskogo parokhodstva (for Yemel'yanov).

YEMEL'YANOVA, I., Geroy Sotsialisticheskogo Truda

Three large populated centers instead of 36 little villages.
Sel'stoi. 15 no.1:18 Ja '60. (MIRA 15:7)

1. Predsedatel' kolkhoza imeni Timiryazeva Gorodetskogo
rayona, Gor'kovskoy oblasti.
(Gorodets District--Farm buildings)

YEMEL'YANOV, I.

We are building reservoirs. Pozh.delo 6 no.7:31 JI '60.
(MIRA 13:7)

1. Predesdatel' Talsinskogo rayispolkoma, Latvyskaya SSR.
(Talsi--Fire extinction--Water supply)

YEMEL'YANOV, I.

International Congress on Automatic Control. Atom.energ. 9 no.5:
418-421 N '60. (MIRA 13:11)
(Automatic control--Congresses)

YEMEL'YANOV, I.A., fel'dsher (selo Kuzedeyava Kemerovskoy oblasti)

Gerasim Vali'evich Pospelov. Fel'd. i akush. 23 no.8:57 Ag '58
(MIRA 11:8)

(POSPELOV, GERASIM VASIL'EVICH)

YEMEL'YANOV, I. A.

Kolkhoz imeni Timiriazeva [The "Timiriazov" Collective Farm]. Moskva, Gos. izd-vo sel'khoz lit-ry, [1953]. 213 p.

SO: Monthly List of Russian Accessions, Vol. 6 No. 12 March 1954.

Yemel'yanov, I.

YEMEL'YANOV, I., geroy Sotsialisticheskogo Truda (Gorodetskiy rayon, Gor'-
kovskaya oblast').

An income of 4 million rubles from flax. Nauka i pered. op. v
sel'khoz. 7 no.12:58 D '57. (MIRA 11:1)

1. Predsedatel' kolkhoza imeni Timiryazeva.
(Flax)

~~YEMEL'YANOV~~ I. Goroy Sotsialisticheskogo Truda.

Building on the Timiriazov Collective Farm, Sel'. stroi. 11 no.4:
6-9 '56 [i.e. '57]. (MLBA 10:5)

1. Predsedatel' kolkhosa imeni Timiryazeva, Gorodetskogo rayona,
Gor'kovskoy oblasti. 2. Deputat Verkhovnogo Soveta SSSR.
(Farm houses)

YEMEL'YANOV, Ivan Abramovich, Geroy Sotsialisticheskogo Truda, deputat Verkhovnogo Soveta SSSR; LAPIDUS, M.A., red.; PROKOP'YEVA, L.N., tekhn.red.

[Raising the standards of agriculture] Povyshaem kul'turu zemle-
deliia. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1960. 133 p.

(MIRA 13:9)

1. Predsedatel' kolkhosa imeni Timiryazeva Gor'kovskoy oblasti
(for Yemel'yanov).

(Agriculture)

SLIN'KO, M.G.; YEMEL'YANOV, I.D.

Stability of reversible exothermic processes in a fluidized bed.
Kin. i kat. 2 no. 4:622-625 JI-Ag '61. (MIRA 14:10)

1. Institut kataliza Sibirskogo otdeleniya AN SSSR.
(Fluidization)

35066
S/195/62/003/001/008/010
E071/E136

11.1330

AUTHORS: Slin'ko, M.G., Buzhdan, Ya.M., Beskov, V.S., and
Yemel'yanov, I.D.

TITLE: Optimal conditions for the production of
ethylene oxide

PERIODICAL: Kinetika i kataliz, v.3, no.1, 1962, 145-154

TEXT: The use of computers in the design of multilayer
contact plants is illustrated on an example of determining the
optimum technological conditions for the process of oxidation
of ethylene in consecutive layers of a catalyst with an ideal
mixing and in a stationary layer at ideal displacement. It was
shown that for two parallel reactions in which the energy of
activation of the side reaction is higher than that of useful
reaction, the temperature should increase with an increasing
degree of conversion. The necessary amount of catalyst for
various outputs of ethylene oxide was calculated.
There are 6 figures and 4 tables.

Card 1/2

Optimal conditions for the ...

S/195/62/003/001/008/010
E071/E136

ASSOCIATION: Institut kataliza SO AN SSSR
(Institute of Catalysis, SO AS USSR)

SUBMITTED: October 19, 1961

Card 2/2

YEMELYANOV, I. G.

Farm Buildings

We build livestock shelters first. Sel'. stroi.,
No. 3 (44), 1952

Monthly List of Russian Accessions, Library of Congress, August, 1952. UNCLASSIFIED.

YEMEL'YANOV, I. G.

Farm Buildings

Construction of livestock shelters. Sots. zhiv. 14, No. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December 195~~4~~⁵, Uncl.
52

YEMEL' YANOV, I.I.

Problem of so-called fractures of the penis. Urologia 21 no.2:70-71
Ap-Je '56. (MIRA 9:12)

1. Iz urologicheskogo otdeleniya (nach. S.P.Den'mukhamedov) Lenin-
gradskogo okruzhnogo voyennogo gosпиталя (nach. N.S.Sokolov)
(PENIS, fractures,
case report (Rus))
(FRACTURES,
penis, case report (Rus))

DEN'MUKHAMEDOV, S.R., YEMEL'YANOV, I.I. (Leningrad)

Gangrene of the scrotum and perineum with urethral involvement.
Urologia 23 no.4:66-67 J1-Ag '58 (MIRA 11:8)

(SCROTUM, gangrene
with perineal urethral fistula (Rus))
(URETHRA, fistula
perineal-urethral, in scrotal gangrene (Rus))
(PERINEUM, fistula
same (Rus))

I.I. YEMEL'YANOV

USSR/Soil Sciences - Soil Biology.

J.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15310

Author : I.I. Yemel'yanov

Inst : Soil Science Institute of the Academy of Sciences
Kazakh SSR.

Title : Contribution to the Problem of Soil Organic Matter in
the Northern Part of the Land About the Caspian Sea.
(K voprosu ob organicheskom veshchestve pochv Severnogo
Prikaspiya).

Orig Pub : Tr. In-ta pochvoved. AN KazSSR, 1956, 4, 200-230.

Abstract : Data is presented on the computation of root and ground
plant mass, the group and fractional organic matter com-
ponents in the soils of the light chestnut subzone and
the brown zone of the Northern part of the land about
the Caspian Sea. One examined the following soils:

Card 1/2

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USSR/Soil Science - Soil Biology.

J.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15310

the light chestnut, the light chestnut with hydromorphic features, the light chestnut solonchaks, the steppe solonetz soils, the chestnut meadow solonetz soils, the brown steppe-wasteland soils of various mechanical composition and the meadow alluvial soils. The analytical matter is listed in 12 tables.

Card 2/2

14-57-6-12432

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 6,
p 101 (USSR)

AUTHOR: Yameli'yanov, I. I.

TITLE: Composition and Properties of Organic Matter in the
Soils of Kazakhstan (Sostav i svoystva organicheskogo
veshchestva pochv Kazakhstana)

PERIODICAL: Tr. In-ta pochvoved. AN KazSSR, 1956, Vol 6, pp 180-
195

ABSTRACT: The aridity and abrupt temperature changes character-
istic of Kazakhstan intensify dehydration and oxi-
dization of ulmic acids and their conversion into
black humic acids. In the series chernozems, dark
chestnut brown soils, chestnut brown soils, and brown
soils, humic C content increases from 45 to 56 percent
of total C, while humic acid C content decreases from
29 to 15 percent. It increases again in sierozems
(up to 18.8 percent to total C). Their higher humic

Card 1/2

YEMEL'YANOV, Ivan Il'ich, starshyy nauchnyy sotr.; KLIOPA, Petr Korneyevich, starshyy nauchnyy sotr.; SELEZNEV, N.G., red.; PULIN, L.I., tekhn. red.

[Economic effectiveness of using ammonia water] Ekonomicheskaya effektivnost' primeneniya ammiachnoi vody. Tula, Tul'skoe knizhnoe izd-vo, 1960. 34 p. (MIRA 14:7)

1, Tul'skaya sel'skokhozyaystvennaya opyt'naya stantsiya (for Yemel'-yanov, Kliopa)

(Ammonia as fertilizer)

YEMEL'YANOV, I.I.; ILYALETDINOV, A.N.

Change in the redox potential of dark Chestnut carbonate soils
as a function of tillage methods. Vest.AN Kazakh.SSR 16 no.12;
45-50 D '60.

(MIRA 14:1)

(Soil chemistry)
(Oxidation-reduction reaction)

YEMEL'YANOV, I.I.

Effect of various tillage practices on the oxidation-reduction potential of newly reclaimed calcareous dark Chestnut soils in Tselinograd Province. Izv. AN Kazakh.SSR. Ser. bot. i pochv. no.2:64-74 '61.
(MIRA 15:2)

(Tselinograd Province--Soils)

MATYSIUK, I.V.; YEMEL'YANOV, I.I.; TIMOSHIN, P.I.; CHULAKOV, Sh.A.

Tillage of dark Chestnut calcareous soils of the Virgin
Territory and plant nutrition. Izv. AN SSSR Ser. biol. no.2:244-
256 Mr-Ap'64 (MIRA 17:3)

1. Institut pochvovedeniya AN KazSSR, Alma-Ata.

YEMEL'YANOV, I.P.

History of the struggle of the Soviet people for efficient
use of working time in industry. Uch. zap. Penz. inzh.-stroil.
inst. no.1:131-156 '61. (MIRA 17:8)

ACC NR: AP5028534

SOURCE CODE: UR/0286/65/000/020/0126/0126

AUTHORS: Gabay, Ye. V.; Gofman, V. I.; Dudchenko, V. V.; Yemel'yanov, I. K. 16
B

ORG: none

TITLE: A hydraulic pressure amplifier. Class 63, No. 175829 [announced by Omega Tractor Plant (Onezhskiy traktorny zavod)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 126

TOPIC TAGS: hydraulic device, mechanical power transmission device, mechanical hydraulic pressure amplifier, amplifier design, amplifier stage, amplifier equipment

ABSTRACT: This Author Certificate presents a hydraulic pressure amplifier containing a casing, a support for a differential lever, and a plunger (see Fig. 1).

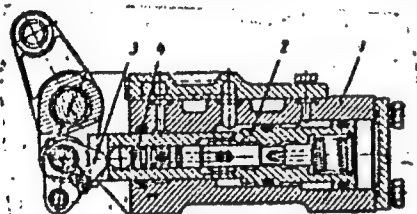


Fig. 1. 1 - Casing; 2 - piston;
3 - support of the differential lever; 4 - plunger.

Card 1/2

UDC: 629.114.2:621.226

L 8481-66

ACC NR: AP5028534

To cause an automatic return of the plunger to its original position, the amplifier is made up of stages. The large-area stage is turned toward the return direction, and the space formed by the stages is permanently connected with the pressure main line. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 12Sep64

BVK
Card 2/2

ACC NR: AP6029962

(A)

SOURCE CODE: UR/0413/66/000/015/0147/0147

INVENTOR: Gabay, Ye. V.; Dudchenko, V. V.; Chekhonina, Z. A.; Yemel'yanov, I. K.

ORG: none

TITLE: Hydraulic one-way booster. Class 63, No. 184635 [announced by Omega Tractor Plant (Onezhskiy traktorny zavod)]

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 147

TOPIC TAGS: clutch, hydraulic equipment, booster design, tracked vehicle

ABSTRACT: An Author Vertificate has been issued for a one-way hydraulic booster to be used primarily for controlling the clutch mechanism of tracked vehicles and

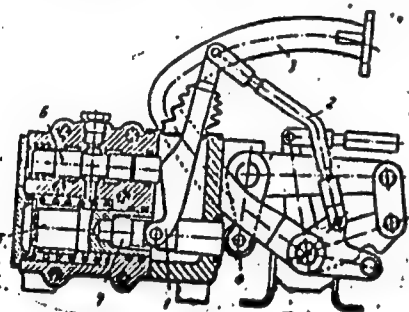


Fig. 1. Hydraulic amplifier

1 - Differential lever; 2 - pull rod; 3 - control element; 4 - drive control lever; 5 - power piston; 6 - slide valve; 7 - push rod.

Card 1/2

UDC: 629.114.2: :621.825.9-82

ACC NR: AP6029962

turning them (see Fig. 1). To increase its operational reliability, a differential lever of the interacting type makes contact at one end of a curved support with the end of a slide valve; the other end is articulately connected inside a channel with a push rod, which interacts with the drive control lever. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 09Dec63/

Cord 2/2

ACC NR: AR6035292

SOURCE CODE: UR/0269/66/000/009/0048/0048

AUTHOR: Fialko, Ye. Y.; Moysya, R. I., Mel'nyk, V. I.; Kolomiyets', H. I. --
Kolomiyets', A. R.; Yemel'yanov, I. M.; Shul'ha, A. I.; Yavlins'kyy, A. Ya.

TITLE: Radar set for observing the drift of meteor trails.

SOURCE: Ref. zh. Astronomiya, Abs. 9.51.411

REF SOURCE: Vistyky Kyivsk. un-tu. Ser. astron., no. 7, 1966, 69-74

TOPIC TAGS: meteor trail, radar antenna, radar meteor observation, train drift

ABSTRACT: A description is given of a radar set designed at the Department of General Radio Engineering of Kiev University and which is intended for measuring the velocity and direction of the drift of ionized trains. The basic parameters of the equipment are as follows: frequency 34.47 mc; transmitter pulse power 100 kw; pulse duration 10 μ sec; sending frequency 500 cps; each fifth pulse is doubled; receiver sensitivity $\sim 3 \mu$ v; receiver passband 600 kc. Identical type wave-duct five-element antennas are used for reception and transmission measurements of the drift velocity radial component is carried out by the pulse-coherent method. The

Card 1/2

UDC: 623.164.85

ACC NR: AR6035292

unit is equipped with a system of noise protection which makes it possible to select reflected signals on the basis of duration, amplitude and code. The equipment was tested in March-May 1964. Article includes a bibliography of 6 titles. V. Lebedinets. [Translation of abstract] [DW]

SUB CODE: 03, 09/

Card 3/3

YEMEL'YANOV, I.P.

Study of evoked potentials recorded by Dawson's superposition method. Trudy LIETIN no.13:46-54 '64.

Symmetry of "spindles" of spontaneous α -activity of the electroencephalogram of the human brain. Ibid.:95-111

Manifestations of relaxation in oscillations of the biopotentials of the brain. Ibid.:112-126

Some properties of the dynamics of changes in the envelope of the electroencephalogram. Ibid.:127-128

Selection and approximate evaluation of possible periodic components of the electroencephalogram. Ibid.:241-247
(MIRA 18:12)

87312

S/019/60/000/021/131/145
A152/A029

10.9300
26.2191

AUTHORS: Yemel'yanov, I.V.; Rakov, N.I.

TITLE: Aircraft Fuel System Pickup

PERIODICAL: Byulleten' izobreteniy, 1960, No. 21, p. 71

TEXT: Class 62c, 14. No. 133352 (633178/27 of July 8, 1959). 1) This pickup is employed, for example, for determining the presence of fuel in supply pipes and fuel tanks. It has the following special feature: in order to obtain a smaller size and reliable operation, differences of pressure losses are used arising as fuel or air passes through small openings. To this end this pickup is made in the form of a spring-loaded slide valve and a piston with openings in its body, both mounted on one common rod. 2) A variant of 1, distinguished by the following special feature: in order that it may produce an electric signal signifying that there is no more fuel, this pickup is provided with an induction coil in its face end, which interacts with a rod coupled with the piston rod by means of a thread. ✓

Card 1/1

ACCESSION NR: AP4032957

S/0286/64/000/008/0089/0089

AUTHOR: Barzon, O. S.; Yemel'yanov, I. V.

TITLE: Aircraft fuel transfer command system. Class 62, No. 162031

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 8, 1964, 89

TOPIC TAGS: fuel transfer, refueling, automatic refueling, aircraft refueling, automatic control system

ABSTRACT: An Author Certificate has been issued for an aircraft command system for the transfer of fuel from one tank to another (see Fig. 1 of the Enclosure). The system consists of a tank pump, nozzle, transfer and float valves, and tubing. It is distinguished by the fact that, for the purpose of providing reliable system operation in the event of a tank pump failure, it employs an emergency device consisting of regulating and check valves, nozzle, and tubing to connect these elements with one another and with the command system. Orig. art. has: 1 figure.

Card: 1/3

ACCESSION NR: AP4032957

ASSOCIATION: none

SUBMITTED: 26Apr63

SUB CODE: AC.50

ATD PRESS: 3058

NO REF SOV: 000

ENCL: 01

OTHER: 000

Card 2/3

ACCESSION NR: AP4032957

ENCLOSURE: 01

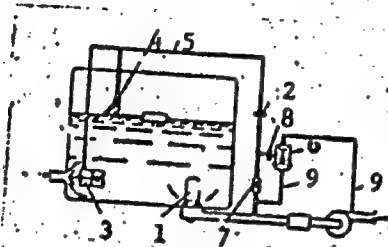


Fig. 1. Aircraft fuel transfer command system

- 1 - Tank booster pump; 2 and 8 - jets;
- 3 - transfer valve; 4 - ball valve;
- 5 - tubing; 6 - regulating valve;
- 7 - check valve; 9 - tubing.

Cord 3/3

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962620016-8

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962620016-8"

L 27267-66 EWT(1)/ETC(m)-6/ETC(f)/EWG(m)/T-2 . WW

ACC NR: AP6009553

(A)

SOURCE CODE: UR/0413/66/000/005/0102/0102

AUTHORS: Zaslavskiy, L. I.; Yemel'yanov, I. V.; Korotayev, S. V.

36
B

ORG: none

TITLE: Device providing a constant pressure drop between auxiliary and main fuel tanks. Class 47, No. 179564

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 5, 1966, 102

TOPIC TAGS: fuel tank, fuel system equipment, pressure regulator

ABSTRACT: This Author Certificate presents a device providing a constant pressure drop between auxiliary and main fuel tanks. The device consists of a safety valve, a regulated throttle, and an under-inflatable auxiliary fuel tank. To provide for a preset pressure drop between the auxiliary and main fuel tanks, the air space of the auxiliary tank is connected into the main air pressure line in parallel with the regulated throttle (see Fig. 1). The safety valve is placed after the regulated throttle.

2

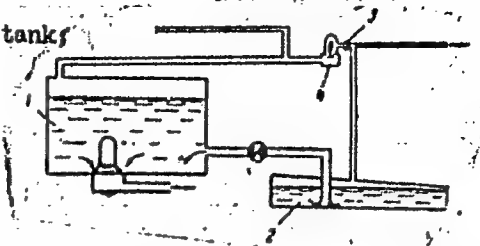
Card 1/2

UDC: 621.646

L 27267-66

ACG NR: AP6009553

Fig. 1. 1 - auxiliary fuel tank; 2 - main tank;
3 - throttle; 4 - valve.



Orig. art. has: 1 diagram.

SUB CODE: 13/ SUBM DATE: 18Apr64

Card 2/2 CC

I-08092-67 EWT(1)/EWT(m) FDN/WW/DJ

ACC NR: AP6029993

SOURCE CODE: UR/0413/66/000/015/0196/0196

INVENTOR: Berzon, O. S.; Yemel'yanov, I. Y. 26
12

ORG: none 2"

TITLE: A system for transferring fuel from aircraft tanks. Class 62, No. 184151

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 196

TOPIC TAGS: aircraft fuel system equipment, aircraft fuel pump

ABSTRACT: This Author Certificate introduces a system for transferring fuel from aircraft tanks, which consists of centrifugal tank pumps and main fuel-supply lines. To supply the engine with given amounts of fuel, a volumetric gage is inserted in the supply lines. The housing of the gage contains two pairs of gears in two separate insulated recesses; one gear in each pair is rigidly set on the common shaft. [SA]

SUB CODE: 21, 01/ SUBM DATE: 15Apr64/

Card 1/1 *mlc*

UDC: 629.13.01/06: 621.67

YEMETIYANOV, I. Ya

AUTHORS:

Beloshel', M. A.; Ensin, A. K.; Alekshenko, P. I.;
Grigor'yants, A. I.; Plorinsky, I. V.; Kimshin, M. Ye.;
Kozlov, A. Ya.; Kuznetsov, K. M.; Sharov, V. M.;
Kuznetsov, Ya. I.; Galasin, A. M.

TITLE:

A Uranium-Graphite Reactor With Superheating of Steam of High Pressure (Uran-grafitovyy reaktor s peregretoyu para vysokogo davleniya)

PARTICULARS:

ABSTRACT:

The 400 kW plant is equipped with 4 uranium-graphite reactors. A reactor and a steam turbine of 100 kW together form a closed block. A number of investigations were carried out for the purpose of checking the individual parts of this block. The following results were obtained:
1) With a thermal flux of $\sim 10^6$ kcal/cm² the steam condenses by weight at the outlet at a value of up to 25%.

2) Several hundred hours' uninterrupted operation of a thermal turbine-blowing stage did not disrupt the channel.
3) The activity of the steam condenser was found to be 10 times

Card 1/3

lower than that of the water in the separator.
4) If the content of steam in the steam-water mixture attains 15 - 20%, a pulsation of the consumption of the mixture occurs. From the moment at which the steam mixture passes from the separator into the turbine, pulsation stops and does not occur again in the course of a further increase of the steam phase.
5) During the initial development of the reactor in the separator the temperature in the fuel channels fluctuates considerably. In some cases stable conditions are established, there are no oscillations.
6) The steam-water mixture was not found to be delayed in any of the channels.

From a plurality of varieties the best scheme for the production of superheated steam was selected (see figures). The turbine-generator BK-100 operates with a steam of 90 atm and a temperature of 400 - 535°C.

The following are the physical characteristics of the reactor:
Thermal output 285 MW
Electrical output 100 MW
Average cycle 750 days
Uranium charge 90 tons

Card 2/3

Uranium enrichment at the beginning of a cycle 1.3 %
Uranium enrichment at the end of a cycle 1.01 %
Breeding ratio at the beginning of a cycle 55 %
Breeding ratio at the end of a cycle 55 %
Amount of U-235 burned-up during a cycle 243 kg
Amount of Pu-239 burned-up during a cycle 55 kg
Amount of Pu-239 and Pu-241 at the end of a cycle 112 kg
Cycle reactivity for temperature effect 0.040
Cycle reactivity for poisoning 0.015
Excess reactivity for the fuel burn-up and long-lived fission products 0.025
Total excess reactivity 0.080
There are 8 figures.

Card 3/3

Y 2 met y a d o v , I y a

1007/89-1-1-13
Dolleshal', M. A., Urolov, A. K., Alenchenkov, P. I.,
Gribovants, A. M., Plotnikov, V. I., Mikhlin, M. V.,
Yemel'yanov, S. I., Kravchenko, A. N., Shadrinov, V. E.,
Mityayev, Ia. I., Galanov, A. N.

A Uranium-Graphite Reactor with Superheating of Steam of High Pressure. II (Uran-grafitovyy reaktor s peregrevom para vysokogo davleniya) (Continued from abstract 2/15)

Atomovaya energiya, 1958, Vol. 5, No. 235-244 (UENR)

The graphite mantle of the reactor (diameter 9.6 m, height 9 m) is built into a cylindrical steel container. The container is filled with nitrogen in order to prevent burning of the graphite. The active zone of the reactor has a diameter of 7.6 m and a height of 6 m. It is built into a reflector mantle of 0.9 m and a zone is used. Graphite of 1 reflector mantle of 0.9 m thickness is used. Graphite and above it a layer of cast iron having a thickness of 0.5 m is fitted. The active zone of the reactor is surrounded by a lower reflector. In the graphite structure provided for 114 channels are provided. 750 of them are provided with fuel elements which are cooled by steam of boiling water and contain up to 5% percentage by weight of steam at the output. The channels are cooled by steam which is heated up to the operating turbine temperature. Six channels contain the active regulating rods, 24 channels are provided for the control rods, and 16 for the shim rods. The limitation channels, cooling tubes are located in 36 channels. The fuel element of the channels is made of active zone in form of drawings. The circuit diagram of the reactor turbine shows the connection between the reactor, the steam generator, the condenser, a system of additional heating of the reactor, a de-aerator (6 atm), 2 preheaters (for high pressure), a separator and feed pump. The water is conveyed into the turbine channels by way of two centrifugal pumps. When entering the channels the water has a temperature of 300°C and a pressure of 155 atm. The mixture of steam and water formed in these channels reaches the separator, where steam and water are separated. From here the water is conveyed to the preheater of the steam generator (which consists of 2 parts), where it is cooled from the saturation temperature of 340°C (pressure in the top-

water 170 atm) down to 320°C. Steam is transferred to the preheater of the secondary circuit. The water of this circuit is in the first section of the preheater brought from a tank separator (215°C) to saturation temperature, which corresponds to a pressure of 110 atm. In the second part it is superheated to all the quantity of steam corresponding to steam turbine. The secondary steam produced in the steam generator is fed in to the steam channels of the reactor, where it is heated up to a temperature of 510°C. The steam reaches the turbine with a pressure of 90 atm and a temperature of 500°C. The main heating of the electric power plant consists of 4 parts arranged one behind the other, the machine hall, the operation room, the de-aerator, and the reactor hall. For an average cycle of 750 days it is shown by calculation that the cost of electricity produced amounts to 100 rubles per kWh. The total cost of the fuel elements and fuel elements operate in a stable regime of 100 rubles per kWh. It is proved that by a slight increase of the degree of enrichment in uranium the average cycle can be increased. Such leads to a reduction of costs. There are 9 1/2 for the and

Card 1/2

Card 3/4

DOLLEZHAL', N. A., KRASIN, A. K.; ALESHCHENKOV, P. I.; GRIGOR'YANTS, A. N.;

FLORINSKIY, B. V.; MINASHIN, M. Ye.; YEMEL'YANOV, I. YA.; KUGUSHEV, N. M.;

SHARAPOV, V. M.; MITYAYEV, Yu. I.; GOLANIN, A. M.;

" A Graphiteuranium Reactor With High Pressure Steam Superheat (Report No. 2139)

International Conference on the Peaceful Uses of Atomic Energy. 2nd, Geneva, 1958.

/Doklady sovetskikh unchenykh; yadernyye reaktory i yadernaya energetika. (Reports of Soviet Scientists; Nuclear Reactors and Nuclear Power) Moscow, Atomizdat, 1959 707 p. (Series: Its; Trudy, vol2) Errata slip inserted. 8,000 copies printed.

YEMEL'YANOV, I. Ya.
DOLLEZSAL, N.A. [Dollezhal, N.A.]; KRASZIN, A.K. [Krasin, A.K.]; GALANYIN,
N.A. [Galanin, N.A.]; ALESCSENKOV, P.I. [Aleshchenkov, P.I.];
GRIGORJANC, A.N. [Grigoryants, A.N.]; JEMELJANOV, I. Ja. [Yemelyanov,
I. Ya.]; KUGUSEV, N.M. [Kugushev, N.M.]; MINASIN, M.E.; MITYAJEV, U.I.
[Mityayev, U.I.]; FLORINSZKIÖ, B.V. [Florinskiy, B.V.]; SARAPOV,
B.N. [Sharapov, B.N.]; ILLY, Jozsef [translator]

Superheated high-pressure steam producing uranium - graphite reactor.
Atom taj 2 no.1:1-47 Ja '59.

GAUZIT, Maurice; KAHAN, T.; BEKKERMAN, I.M. [translator];
POLINKOVSKAYA, E.D. [translator]; YEMEL'YANOV, I. Ya.,
red.

[Control of nuclear reactors] Upravlenie iadernymi re-
aktorami. Pod obshchei red. I. Ya. Emel'ianova. Moskva,
Atomizdat, 1960. 173 p. (MIRA 16:10)
(Nuclear reactors)

Yemel'yanov, I. Ya.

S/089/60/008/06/01/021
B006/B063 82302

21.1910

AUTHORS:

Feynberg, S. M., Konobeyevskiy, S. T., Dollezhal', N. A.,
Yemel'yanov, I. Ya., Tsykanov, V. A., Bulkin, Yu. M.,
Zhirnov, A. D., Filippov, A. G., Shchipakin, O. L.,
Perfil'yev, V. P., Samoylov, A. G., Ageyenko, V. I.

TITLE:

The CM(SM) Research Reactor With a Capacity of 50 Mw

PERIODICAL:

Atomnaya energiya, 1960, Vol. 8, No. 6, pp. 493-504

TEXT: The present article gives a detailed description of the Russian 50-Mw research reactor which has a neutron flux of $2.2 \cdot 10^{15}$ n/cm²sec. It is used both for research work in nuclear physics and reactor engineering; obtaining of new, transuranic elements, testing of fission and building materials under neutron and gamma bombardment, within the temperature range 20°K - 2000°C, and in various media; spectrometric examination of intermediate neutrons; examination of the gamma spectrum of the (n,γ) reaction; examination of short-lived isotopes and neutron diffraction analyses. The authors first discuss some characteristic data.

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The CM(SM) Research Reactor With a
Capacity of 50 Mw

S/089/60/008/06/01/021
B006/B063 82302

The water-cooled, reflected reactor works with U²³⁵ enriched to 90%. The critical mass (without the experimental holes) is 7.3 kg of U²³⁵, and including the experimental holes, it amounts to 9.5 kg (loading: ~11.7 kg). The maximum heat flow from the fuel element attains $5.5 \cdot 10^6 \text{ kcal/m}^2 \cdot \text{h}$; the surface temperature does not exceed 195°C. Fig. 1 shows the distribution of the neutron flux in the cross section of the reactor; the flux has two maxima, one in the center of the cooling-water cavity ($2.2 \cdot 10^{15}$), and the other in the lateral reflector ($5 \cdot 10^{14} \text{ n/cm}^2 \cdot \text{sec}$). The flux/power ratio is $4.4 \cdot 10^{10} \text{ n/cm}^2 \cdot \text{sec.kw}$. With a 25% submersion depth of the fuel elements, the reactor can be in continuous operation for a period of 60-65 days. Several details are dealt with next. Experimental holes: The reactor has five horizontal and fifteen vertical holes. The horizontal ones are in the central part of the active zone, whose longitudinal and cross sections are shown in Figs. 2,3. At the output of the holes the neutron flux amounts to $\sim 3 \cdot 10^{10} \text{ n/cm}^2 \cdot \text{sec}$. The vertical holes are located in the reflector with the exception of the central ones. Three of them serve for obtaining transuranic elements (one of these being in the center), two low-temperature holes serve for metal

Card 2/5

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The CM(SM) Research Reactor With a
Capacity of 50 Mw

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tests, two high-temperature holes for the testing of fuel elements, chemical analyses of the cooling water, and corrosion tests. All of these holes are water-cooled. Furthermore, five gas-cooled holes serve for testing fission and building materials in the range of 0 - 600°C; one hole (cooled with helium gas or liquid H₂) serves for material tests at low temperatures; one gas-cooled hole for material tests at ~2000°C; one hole cooled with liquid metal (1000°C) for testing fuel elements and coolants. Construction: The following demands were made on construction: creation of a small active zone that would withstand high thermal loads for a long time, and its cooling; application of a maximum number of experimental holes (their distribution is shown in Fig. 3); possible exchange of fuel assemblies without pressure drop. Figs. 2-5 illustrate particulars of the construction. Reactor body and cover: Fig. 2 is described. The cylindrical part is made of 36 mm thick stainless steel of the grade 1X18H9T (1Kh18N9T). The reflector consists basically of beryllium oxide; it is made up of blocks comprising about 65 different types, which are enclosed by steel plates on top and at the bottom. Fuel element assemblies: The element itself has the shape of a plate with a

Card 3/5

4

The CM(SM) Research Reactor With a
Capacity of 50 Mw

S/089/60/008/06/01/021
B006/B063 82302

core, pressed from uranium oxide powder and electrolytic nickel; the core is contained in a nickel can. Fig. 6 shows a section through the assembly, Fig. 7 another through a fuel element. Data of one such element are compiled; every element contains 12.5 g U²³⁵. The cylindrical body shield (Fig. 2) divides the inner reactor cavity into two zones. The functions of this shield are briefly discussed, and the cooling water circulation is described next. The control system is described in greater detail. This system consists of two automatic regulators with two regulation rods each, four shim rods, and four safety rods which can also be used as shim rods. The automatic regulation is operated by 13 ionization chambers located outside the reactor body; it covers the power range from 0.5 to 100%. Several details concerning safety and shim rods are thoroughly discussed. Reactor shield: Fig. 8 shows a cross section through reactor plus shield. The latter consists of steel and heavy concrete. A few details are described, and the process of fuel extraction is briefly dealt with. The cooling system is finally discussed. It consists of four closed, separate loops. The water is kept flowing by circulating pumps (500 t/h, 10 atm); the heat exchange power is 15 Mw.

Card 4/5

The CM(SM) Research Reactor With a
Capacity of 50 Mw

S/089/60/008/06/01/021
B006/B063 82302

There are 8 figures and 1 Soviet reference.

SUBMITTED: March 15, 1960

Card 5/5

4

ACCESSION NR: AT4019050

S/0000/63/000/000/0207/0210

AUTHOR: Avayev, V. N.; Yegorov, Yu. A.; Yemel'yanov, I. Ya.; Zhirnov, A. D.; Orlov, Yu. V.; Remizov, V. A.

TITLE: The Gamma-spectrum of a research reactor

SOURCE: Voprosy* fiziki zashchity* reaktorov; sbornik statey (Problems in physics of reactor shielding; collection of articles). Moscow, Gosatomizdat, 1963, 207-210

TOPIC TAGS: reactor, reactor shielding, reactor Gamma spectrum, Gamma spectrum.

ABSTRACT: By means of a scintillation vapro spectrometer, the γ -spectrum of a water-water, pool-type research reactor was measured. The gamma quanta were directed from the active section of the reactor to the spectrometer through a lateral experimental channel, 100 mm in diameter and 2.5 m in length. To exclude the influence of gamma quanta scattered in the channel, a lead collimator, 180 mm in length with a collimation aperture diameter of 10 mm, was inserted in the channel. The spectrometer sensor was placed behind the concrete shielding of the reactor, and the gamma quanta flow passed through a 260-mm long collimator of paraffin with boron and lead carbide. Since the spectrometer was neutron-sensitive, even if only to a negligible degree, tests were conducted under identical conditions with a 100-mm thick bismuth filter and the introduction

Card 1/3

ACCESSION NR: AT4019050

of the proper corrective factor. The results of the experiment are discussed and analyzed. The reactor spectrum was measured to approximately 7.8 Mev. No gamma lines with greater energy were detected, the explanation for this being that in the high energy region the γ -radiation is basically caused by the absorption of neutrons by iron, nickel and chromium. These elements are not present in the active part of the reactor, while the γ -radiation yield from the tube of the gate valve is small and only a negligible part of the trapped gamma quanta is able to reach the spectrometer sensor from the tube. Orig. art. has: 2 figures and 2 tables.

ASSOCIATION: None

SUBMITTED: 14Aug63

DATE ACQ: 27Feb64

ENCL: 01

SUB CODE: NS

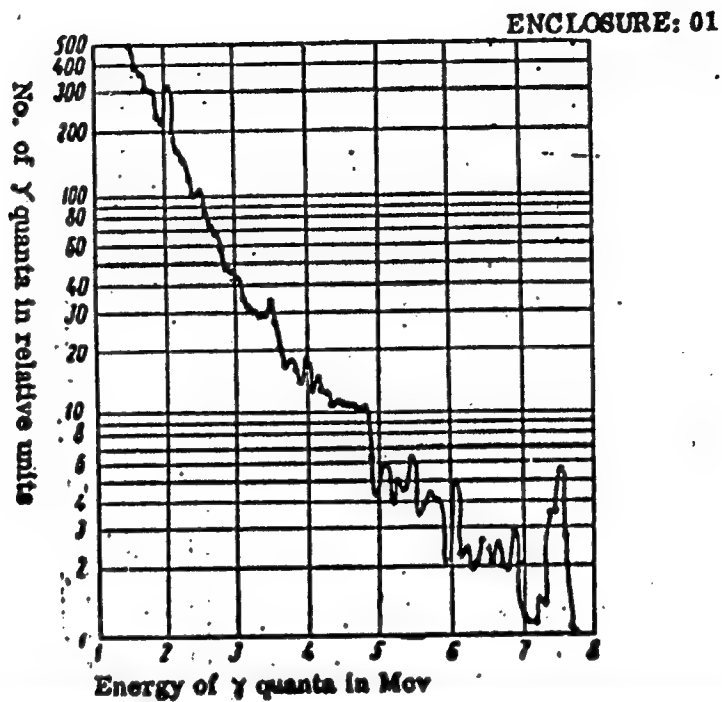
NO REF SOV: 005

OTHER: 001

Card ^{2/3}

ACCESSION NR: AT4019050

Fig. 1 - Gamma-spectrum
of the reactor.



Card 3/3

YEMEL'YANOV, I. Ya.; FILIPPOV, A. G.

"Reactor control systems."

report submitted for 3rd Intl Conf, Peaceful Uses of Atomic Energy, Geneva,
31 Aug-9 Sep 64.

DOLLEZHIAL, N. A.; ALESHCHENKOV, P. I.; YEMELYANOV, I. Yu.; ZHIRNOV, A. D.; ZVEREVA, G. A.;
MORGUNOV, N. G.; KIRYUKOV, K. A.; MITYAYEV, Yu. I.; KNYAZEVA, G. D.

"Development of superheating power reactors of Beloyarsk nuclear power station
(BAES) type."

report submitted for 3rd Intl Cong, Peaceful Uses of Atomic Energy, Geneva,
31 Aug-9 Sep 64.

TOP SECRET - FRODO BAGGINS

ADDITION: ALSO SEE: 6-10-78

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962620016-8

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APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962620016-8"

Card 3/3

L 24212-65 EPT(m)/EPT(c)/EPT(n)-2/EPR Pr-4/Pr-4/Pu-4 DA

AUTHOR: Polashkin, R. N., Iemelyanov, I. A.,
Y. I. Gerasimov, L. E. Kuznetsov, S. P., Sirotkin, A. P., Tokarev.

"APPROVED FOR RELEASE: 03/15/2001

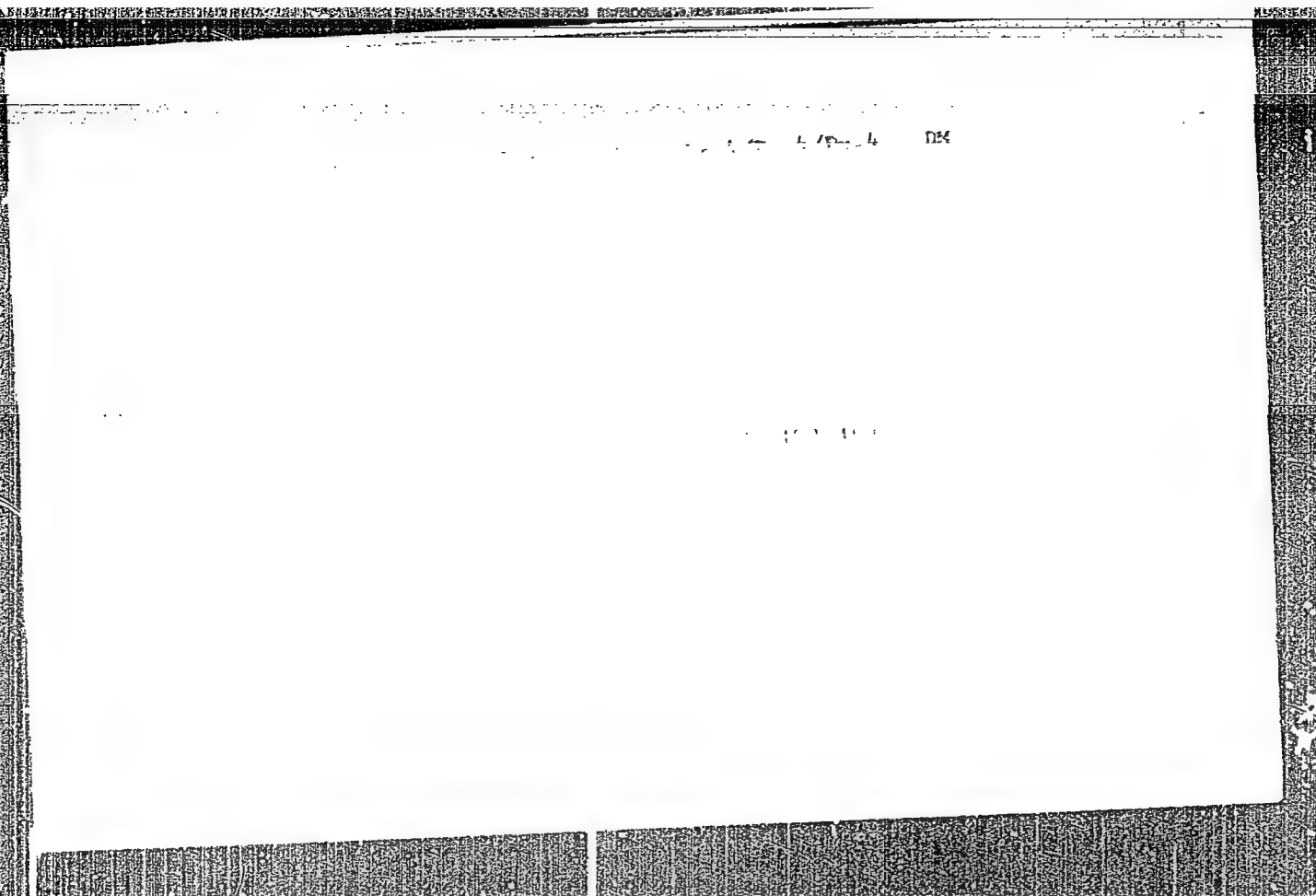
CIA-RDP86-00513R001962620016-8

APPROVED FOR RELEASE: 03/15/2001

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APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962620016-8"

L 24218-65 ENT(m)/EPF(c)/EPF(n)-2/EPR Pr-4/Ps-4/Pu-4 DM

ACCESSION NR: AP5001288

S/0089/64/017/006/0463/0474

(deceased)
AUTHOR: Kurchatov, I. V.; Feynberg, S. M.; Dollezhal', N. A.; Aleshchenkov, P. I.; Drozdov, F. S.; Yemel'yanov, I. Ya.; Zhirnov, A. D.; Kazachenko, M. A.; Knyazeva, G. D.; Kondrat'yev, F. V.; Lavrenikov, V. D.; Morgunov, N. G.; Petunin, B. V.; Smirnov, V. P.; Talyzin, V. M.; Filippov, A. G.; Chikhladze, I. L.; Chulkov, P. M.; Shevelev, Ya. V.

TITLE: Pulse graphite reactor¹⁹ IGR

SOURCE: Atomnaya energiya, v. 17, no. 6, 1964, 463-474

TOPIC TAGS: pulse graphite reactor, high neutron flux pulse, nuclear reactor

ABSTRACT: The paper is a summary of the SSSR #322a report at the International Conference on Peaceful Uses of Atomic Energy in Geneva, 1964. It represents an elaboration of the description of the pulse graphite reactor IGR given by S. M. Feinberg at the Second International Conference. The pulse reactors are used when a high neutron flux is desirable. The described reactor was in opera-

Card 1/2

L 24218-65

ACCESSION NR: AP5001268

tion for several years, and is still working without failure. Orig. art. has: 6 figures

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: NP'

NR REF SOV: 002

OTHER: 001

Card 2/2

VORONOVA, N.A., doktor tekhn. nauk; GINSBURG, I.M., inzh.; YELIYANOV, I.Ya.,
inzh.; GASPARDOVA, S.N., inzh.; KONSTANTINOVSKIY, V.M., inzh.

Cylpebs form low-carbon cast iron and conditions for its use.
TSement 30 no.5:15-17 S-0 '64. (MIRA 17:12)

L 6959-66 EWP(m)/EPF(c)/ZPF(n)-2/ZNT(1)/ENT(m)/ETC/ENG(m)/ WH
 ACC NR: AP5016681 SOURCE CODE: UR/0170/65/008/006/0768/0772

AUTHOR: Yemel'yanov, I. Ya.; Gavrilov, P. A.; Seliverstov, B. N. 51
 44, 55 44, 55 44, 55 B

ORG: none

TITLE: An investigation of the dynamic characteristics of heat transfer apparatus
 by the method of correlation analysis 21, 44, 55

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 8, no. 6, 1965, 768-772

TOPIC TAGS: stochastic process, thermal conduction, thermal excital, steam super-
 heat 1, 44, 55

ABSTRACT: This paper is the extension of work of the authors [Gavrilov, P. A. and
 Seliverstov, B. N., *Atomnaya Energiya*, No. 8, 1963]. Certain dynamic characteris-
 tics are determined for the engineering model of the Beloyarsk Atomic Power Station
imeni I. V. Kurchatov. Although the test stand in general had a low noise level the
 authors noted tendencies toward oscillation during entering and exiting flows at the
 superheater. The artificial excitation of the exiting flow signal impeded the study
 when it equalled the stimulus noise. The oscillatory fluctuations act stochastically

Card 1/2

UDC: 621.3.012.6 + 536.27

0902 0084

L 6959-66

ACC NR: AP5016681

and are deemed to be due to unseparated water and moisture in the superheater channel. At normal water level in the evaporator, steam generation instabilities cause pressure oscillations in the evaporator which are damped out by the time the superheater mouth is reached. This is because the steam is compressed and the evaporator is relatively large. As the level rises volume decreases and steam generation fluctuations appear as immediate pressure oscillations at the superheater. Oscillations in front of the throttle valve of the condenser are identical with those in the evaporator. The stochastic behavior of the superheater channel exit pressures and those of the evaporator point to a statistical method of correlation analysis for determining dynamic characteristics. The mathematical model for the superheater channel is based on equations describing: thermal equilibrium of discharged steam, of thermal conductivity fuel element and the pressure drop in the line between superheater and steam generator. Normalized correlation terms are approximated by a sum of components, of which the primary component simulates the harmonic oscillation of a feed pump piston. The secondary component, a high frequency component relating the time of heat transfer (from the heating wall to the boiling fluid) to the steam bubble life in the boiling volume, simulates the hydrodynamic instability of the steam generator. Orig. art. has: 5 figures and 3 formulas.

SUB CODE: TD,MA/ SUBM DATE: 19Sep64/ ORIG REF: 004/ OTH REF: 000

Card 2/2 *rds*

L 5075-66 ENT(m)/EPF(n)-2/T DM
ACC NR. AF5022630

UR/0089/35/019/002/0131/0137
621.311.25

AUTHOR: Yemel'yanov, I. Ya.; Gavrilov, P. A.; Seliverstov, E. N. ²³_B

TITLE: Investigation of dynamic characteristics of the first power unit of the Beloyarsk atomic power plant im. I. V. Kurchatov

SOURCE: Atomnaya energiya, v. 19, no. 2, 1965, 131-137

TOPIC TAGS: nuclear power plant, nuclear power reactor

ABSTRACT: The investigations were conducted by using the method of reactor-system dynamic simulation. A special electronic analog computing machine was used simultaneously with the operating control system. Physical and heat-generating transient phenomena were interpreted by means of differential equations and the parameters were established. Neutron processes were also described by differential equations and the changes in densities and temperatures of coolants, uranium, and graphite were determined. The authors do not deal with the mathematical analysis itself. They, instead, describe the techniques involved in such research; evaluate the results, and present some practical examples. A schematic diagram of steam-generating arrangement is given. The simultaneous operation of the analog machine and of the control system

Card 1/2

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L 2070-00

ACC NR: AF5022630

is explained and illustrated. The changes in temperatures and reactivities under different operational conditions are reflected in many curves. In addition, the theoretical characteristics of the reactor were compared with the experimental data. Finally, it is stated that the analysis of reactor dynamics was essential to the determination and verification of the reactor stability. As a result of these investigations, new optimal parameters for the main control system were selected. Orig. art. has: 1 diagram, 1 photo, 11 graphs and 1 table.

ASSOCIATION: none

SUBMITTED: 18Sep64

ENCL: 00

SUB CODE: NP

NO REF SOV: 003

OTHER: 000

Card 2/2 *nd*

1 EMELIYANOV, I.E.

USSR/Cultivated Plants - Grains.

L-2

Abs Jour : Ref Zhur - Biologiya, No 16, 25 Aug 1957, 69237

Author : Emeliyanov, I.E.

Inst :

Title : Sugar Corn in the USA.

Orig Pub : Kukuruz, 1957, No 1, 55-58

Abstract : No abstract.

Card 1/1

Country : USSR
Category : Cultivated Plants. Cereals. Leguminous Plants.
Tropical Cereals. M

Abs Jour : RZhBiol., No 6, 1959, No 24833

Author : Yemel'yanov, I. Ye.

Inst : -

Title : Plucking of Panicles in the Hybridization Regions of the United States.

Orig Pub : Kukuruz, 1958, No. 7, 62-63

Abstract : Organizational operation on the plucking of panicles in the corn hybridization parcels of the firm "Pioneer" (United States) is described.

Card : 1/1

YEMEL'YANOV, I.Ye., agronom; FREYDMAN, S.M., red.; GOR'KOVA, Z.D.,
tekhn. red.

[The farm of Roswell Garst] Ferma Rosuella Garsta. Moskva,
Gos. izd-vo sel'khoz. lit-ry, 1960. 92 p. (MIRA 14:5)
(Iowa--Farms)

YEMEL'YANOV, I.Ye.; FOL'KMAN, Ye.N., red.; TRUKHINA, O.N., tekhn.
red.

[Hybrid sorgo; translations from foreign periodical literature]
Gibridnoe sorgo; sbornik perevodov iz inostranoi periodicheskoi literatury. Moskva, Sel'khozizdat, 1962. 139 p.
(MIRA 1:10)

(Sorghum)

YEMEL'YANOV, K.

The small rivers in the service of the seven-year plan. Rech.
transp. 21 no.8:13-14 Ag '62. (MIRA 18:9)

1. Proizvoditel' putevykh rabot Volgogradskogo tekhnicheskogo
uchastka puti.

YEMER 10, 4.

They were called river sentries. Rech. transp. 24 no.5:12-13 '65.
(MIRA 18:7)

YEMEL'YANOV, K.N.; KONDRAT'YEVA, T.M.; YEMEL'YANOV, K.N.

Effect of large doses of roentgen rays on tissue cultures. Doklady
Akad. nauk SSSR 81 no.6:1047-1050 21 Dec 51. (CINL 21:5)

1. Presented by Academician A.I. Oparin 29 October 1951.
2. Laboratory of Biophysics, Isotopes and Irradiation attached to the Division of Biological Sciences of the Academy of Sciences USSR and the Central Roentgenological, Radiological, and Cancer Institute.

YEMEL'YANOV, K.N.

Measuring the dose fo slow electrons in equivalent roentgens.
Trudy Inst.biol.fiz. no.1:288-292 '55. (MLRA 9:9)
(ELECTRONS)

YEMEL'YANOV, K.N.

Dismountable X-ray tube for close-focus irradiations of biological
objects. Trudy Inst.biol.fiz. no.1:293-297 '55. (MIRA 9:9)
(ELECTRON TUBES) (X RAYS--APPARATUS AND SUPPLIES)

IEFEL'YANOV, A. M.

"Measurement of Doses of Slow Electrons in Equivalent Roentgen Units"
"An X-Ray Tube Which Can Be Dismantled and Is to Be Used in Short-Focus
Irradiation of Biological Objects"

Trudy Instituta Biologicheskoy Fiziki, No 1, 1956
S916, 5 Mar 1956, p48

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S/089/61/010/004/022/027
B102/B205

21,5100

AUTHORS: Alekseyev, N. G., Yemel'yanov, K. N., Klimenko, G. K.,
Rybakov, B. V., Rostovtsev, A. A.

TITLE: A universal gamma-ray source for use in radiochemical studies

PERIODICAL: Atomnaya energiya, v. 10, no. 4, 1961, 396-400

TEXT: A gamma-ray source for use in radiochemistry is described, which meets the following requirements: 1) It has an inner radiation chamber of 50 cm³ and a dose rate of 500 r/sec + 10% (depending on the spacing between source and irradiated sample, the dose rate varies from 150 to 15 r/sec); 2) tests can be made at regulated high and low temperatures; 3) remote control of temperature and telemetering of several parameters is possible; 4) the source operates without water, is reliable in operation, has exchangeable parts, and causes no radiation damage. The cylindrical radiator is composed of 24 Co⁶⁰ sources, is 160 mm high, and has a total activity of 5000 gram-equivalent of Ra. The sources are arranged in two rows within a diameter of 75 mm. Thus, the volume in the center is

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~50 cm³. The sample specimen is placed inside the aluminum container (see Fig. 1). The radiator is housed within a lead container weighing 1200 kg, which serves for protection against radiation during transport and operation. It is enclosed by a steel jacket, and has three gates, one in the direction of its axis and two on the sides, which are closed during transport. Outside the closed device, the dose rate is not higher than 20μr/sec. During operation the device is placed in a special channel within a shielded cabin, and is shielded by 600-kg plates. The whole setup is shown in Figs. 2 and 3. A general view of the device in working position is shown in Fig. 4. The circuit diagram used to control the radiator chamber, the signaling, and the automatic blocking of the gates and the magnetic gate lock is shown in Fig. 5. Control operations are done from a board. The individual operations are done in strict order (indication of the pilot lamps 1-4). Unloading and loading operations are illustrated by Figs. 6-7. There are 7 figures.

SUBMITTED: July 2, 1960

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BIBERGAL', A.V.; YEMEL'YANOV, K.N.; KOROTKOV, M.M.; LESHCHINSKIY, H.I.;
RATNER, T.G.

Transportable γ -ray apparatus GUPOS - Cs¹³⁷ -800 for presowing
irradiation of seeds. Atom. energ. 12 no.2:159-160 f '62.
(MIRA 15:1)

(Radiation sterilization)

YEMEL'YANOV K.S.
KONOVALOV, I.M.; doktor tekhnicheskikh nauk, professor; YEMEL'YANOV, K.S.;
ORLOV, P.N.; FEDOROV, V.V., redaktor; VOLCHOK, K.A., ~~tekhnicheskij~~
redaktor.

[Principles of ice control in river navigation] Osnovy ledotekhniki
rechnogo transporta. Leningrad, Izd-vo Ministerstva rechnogo flota
SSSR, 1952. 261 p. [Microfilm] (MLRA 7:12)
(Inland navigation--Cold weather conditions)(Ice on
rivers, lakes, etc.)

YEMEL'YANOV, L.A.

Flow of diesel fuel through a porous diaphragm. Trudy TSNIDI
no.37:57-69 '61. (MIRA 15:8)
(Diesel fuels) (Filters and filtration)

YEMEL'YANOV, L.A.

Filtration of diesel fuel. Trudy TSNIDI no.37:70-82 '61.
(Diesel fuels) (Filters and filtration) (MIRA 15:8)

PHASE I BOOK EXPLOITATION

SOV/6275

Yemel'yanov, Leonid Aleksandrovich

Fil'tratsiya dizel'nogo topliva (Diesel-Fuel Filtration) Moscow, Mashgiz, 1962. 105 p. 5000 copies printed.

**Reviewer: I. A. Kharchenko, Candidate of Technical Sciences, Docent;
Ed.: G. N. Gusev, Engineer; Ed. of Publishing House: M. P. Yurkevich,
Engineer; Tech. Ed.: M. M. Peterson; Managing Ed. for Literature on
Machine Design and Operation; Leningrad Department, Mashgiz: F. I.
Fetisov, Engineer.**

**PURPOSE: This book is intended for engineers and technicians concerned
with problems of diesel-fuel filtration.**

**COVERAGE: The book, which contains some previously unpublished infor-
mation, discusses the design, function, and requirements of filters used
in fuel systems of diesel engines. The text includes a comparative**

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